

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM NO.

FOR
GRANITE CONSTRUCTION COMPANY
CAPAY AGGREGATE PLANT
YOLO COUNTY

This Monitoring and Reporting Program (MRP) describes requirements for monitoring aggregate wash water ponds, aggregate wash water, and groundwater. This MRP is issued pursuant to Water Code Section 13267. The Discharger shall not implement any changes to this MRP unless and until a revised MRP is issued by the Executive Officer.

All samples shall be representative of the volume and nature of the discharge or matrix of material sampled. The time, date, and location of each grab sample shall be recorded on the sample chain of custody form. Field test instruments (such as those used to measure pH and dissolved oxygen) may be used provided that:

1. The operator is trained in proper use and maintenance of the instruments;
2. The instruments are calibrated prior to each monitoring event;
3. The instruments are serviced and/or calibrated by the manufacturer at the recommended frequency; and
4. Field calibration reports are submitted as described in the "Reporting" section of the MRP.

PIT AND SETTLING POND MONITORING

Each pit and settling pond that receives wash water or fines shall be inspected weekly and monitored as follows:

<u>Parameter</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>	<u>Reporting Frequency</u>
Freeboard	0.1 Feet	Measurement	Weekly	Monthly
Berm condition	N/A	Observation	Weekly	Monthly

PIT AND WASH WATER MONITORING

A grab sample shall be obtained from each active pit and wash water settling pond, and shall be monitored as follows:

<u>Constituent/Parameter</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>	<u>Reporting Frequency</u>
Electrical conductivity	umhos/cm	Grab	Monthly	Monthly
pH	std.	Grab	Monthly	Monthly

<u>Constituent/Parameter</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>	<u>Reporting Frequency</u>
Standard Minerals ¹	mg/L	Grab	Semi-annually	Monthly ²

¹ Standard Minerals shall include alkalinity, hardness, total dissolved solids, calcium, magnesium, potassium, sodium, chloride, fluoride, nitrate, sulfate, and chromium.

² Results shall be included in the monthly report for the last month of the calendar quarter.

GROUNDWATER MONITORING

The Discharger shall monitor groundwater quality, and shall analyze groundwater samples for all of the parameters required by Yolo County. Effective immediately, all monitoring wells shall be sampled quarterly. Upon completion of four consecutive quarters of groundwater monitoring, the frequency shall be reduced to once per year. Regardless of the sampling frequency, groundwater monitoring results shall be submitted in the Annual Monitoring Report.

Groundwater elevations shall be measured prior to purging. Each well shall be purged of at least three well volumes until pH and electrical conductivity have stabilized prior to sampling. Depth to groundwater shall be measured to the nearest 0.01 feet. Water table elevations shall be calculated based on surveyed wellhead elevations and used to determine groundwater gradient and direction of flow. Groundwater samples shall be collected and analyzed using approved EPA methods. With the exception of samples to be tested for coliform organisms, samples shall be filtered prior to preservation.

REPORTING

In reporting monitoring data, the Discharger shall arrange the data in tabular form so that the date, sample type (e.g., pit, settling pond, groundwater), and reported analytical result for each sample are readily discernible. The data shall be summarized in such a manner to clearly illustrate compliance with waste discharge requirements and spatial or temporal trends, as applicable. The results of any monitoring done more frequently than required at the locations specified in the Monitoring and Reporting Program shall be reported in the next scheduled monitoring report.

As required by the California Business and Professions Code Sections 6735, 7835, and 7835.1, all groundwater quality evaluations shall be prepared under the direct supervision of a Registered Engineer or Geologist and signed by the registered professional.

A. Monthly Monitoring Reports

Monthly Monitoring Reports shall be submitted to the Regional Board on the **1st day of the second month following sampling** (i.e. the January Report is due by 1 March). At a minimum, the Monthly Monitoring Report shall include:

1. Total weight of material processed in tons.
2. Results of pit and pond monitoring.
3. A current scaled map depicting the locations of all active pits, settling ponds, the locations where freeboard is measured, and wash water sampling locations.
4. A comparison of monitoring data to the discharge specifications and an explanation of any violation of those requirements. Data shall be presented in tabular format.
5. Copies of laboratory analytical report(s).
6. A calibration log verifying calibration of all field monitoring instruments used.

B. Annual Monitoring Report

An Annual Monitoring Report shall be submitted to the Regional Water Board by **1 February** each year. The Annual Monitoring Report shall include the following:

1. Results of all groundwater monitoring, including all groundwater elevation and water quality data obtained in accordance with the mining permit issued by Yolo County.
2. A narrative description of all preparatory, monitoring, sampling, and analytical testing activities for the groundwater monitoring. The narrative shall be sufficiently detailed to verify compliance with the WDRs, this MRP, and the Standard Provisions and Reporting Requirements. The narrative shall be supported by field logs for each well documenting depth to groundwater; parameters measured before, during, and after purging; method of purging; calculation of casing volume; and total volume of water purged;
3. For each groundwater monitoring event, calculation of groundwater elevations, groundwater flow direction and gradient on the date of measurement, comparison of previous flow direction and gradient data, and discussion of seasonal trends if any;
4. A narrative discussion of the analytical results for all groundwater locations monitored including spatial and temporal trends, with reference to summary data tables, graphs, and appended analytical reports (as applicable);
5. A comparison of monitoring data to the groundwater limitations and an explanation of any violation of those requirements;
6. Summary data tables of all historical and current water table elevations, flow direction, and groundwater analytical results;
7. A scaled map showing relevant structures and features of the facility, the locations of monitoring wells and any other sampling stations, and groundwater elevation contours referenced to mean sea level datum;
8. Copies of laboratory analytical report(s) for groundwater monitoring.
9. An evaluation of the groundwater quality;

10. A discussion of compliance and the corrective actions taken, as well as any planned or proposed actions needed to bring the discharge into full compliance with the waste discharge requirements;
11. A discussion of any data gaps and potential deficiencies/redundancies in the monitoring system or reporting program.

A transmittal letter shall accompany each self-monitoring report. The letter shall discuss any violations during the reporting period and all actions taken or planned for correcting violations, such as operation or facility modifications. If the Discharger has previously submitted a report describing corrective actions and/or a time schedule for implementing the corrective actions, reference to the previous correspondence will be satisfactory. The transmittal letter shall contain a statement by the Discharger or the Discharger's authorized agent, under penalty of perjury, that to the best of the signer's knowledge the report is true, accurate, and complete.

The Discharger shall implement the above monitoring program as of the date of this Order.

PAMELA C. CREEDON, Executive Officer

ALO:8/27/08

(Date)